UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/720,758	11/25/2003	Masahiro Kurosawa	62807-151	3115

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EXAMINER
JARRETT, SCOTT L

ART UNIT	PAPER NUMBER
3624	

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11/25/2008	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/720,758	KUROSAWA ET AL.
	Examiner	Art Unit
	SCOTT L. JARRETT	3624

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _19 September 2008_.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1,2,5-10,13-15 and 17-22_ is/are pending in the application.

   4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1,2,5-10,13-15 and 17-22_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

   Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

   Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

   a)☐ All   b)☐ Some * c)☐ None of:

   1.☐ Certified copies of the priority documents have been received.

   2.☐ Certified copies of the priority documents have been received in Application No. _____.

   3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

   * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☒ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
   Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   This **Final** Office Action is in response to Applicant's amendment filed September
19, 2008. Applicant's amendment amended claims 1-2, 5-10, 13-15 and 17, canceled
claims 3-4, 11-12 and 16 and added new claims 18-22. Currently claims 1-2, 5-10, 13-
15 and 17-22 are pending.

Response to Amendment

2.   The Objection to claims 9-17 in the previous office action is withdrawn in
response to Applicant's amendments.

Response to Arguments

3.   Applicant's arguments with respect to claims 1-2, 5-10, 13-15 and 17-22 have
been considered but are moot in view of the new ground(s) of rejection.

Claim Rejections - 35 USC § 103

4.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

5.   Claims 1-2, 5-10, 13-15 and 17-22 are rejected under 35 U.S.C. 103(a) as being

unpatentable over Aman et al., U.S. Patent no. 5,603,029 in view of Bernardin et al.,

U.S. Patent No. 7,093,004.

        Regarding Claims 1, 9 and 17 Aman et al. teach a load balancing system and

method having a plurality of information processing modules and storage that *can be*

shared among business services comprising:

        - registering a business configuration definition of each business service

including a schedule of the business service with a business configuration management

repository (Column 13, Lines 50-68; Column 14, Lines 1-15; Column 15, Lines 45-68;

Figures 4-5);

        - storing at least a service level objective of each business service in a service-

level-objective table (goal, policy; Column 7, Lines 37-50; Column 12, Lines 34-64);

        - storing information on performance of each information processing module in a

performance management table (Column 14, Lines 10-41; Column 15, Lines 8-44;

Figure 3);

- reading the schedule of a designated business service from the registered business configuration definition (assignments, requests; Column 12, Lines 25-35; Column 14, Lines 43-55; Figures 5, 8A, 9A);

- acquiring the stored service level agreement of the designated business service (Column 7, Lines 37-50; Column 12, Lines 34-64);

- partitioning the schedule of the designated business service into a plurality of partial schedules according to the service level objective (requests, session placement; Column 17, Lines 33-37; Column 28, Lines 18-53; Figures 11, 12A, 12B);

- selecting one or more information processing modules of the plurality of processing modules who performance information satisfies the service level objective in each partial schedule (Column 13, Lines 33-45; Column 28, Lines 18-53; Figure 11); and

- reserving the information processing modules selected satisfying the service level objective for executing the designated business service in the schedule (Column 13, Lines 33-45; Column 28, Lines 18-53; Column 30, Lines 1-15; Figure 11, 12A, 12B).

Aman et al. does not expressly teach comparing judgment information or omitting a step in the start or finish process of the designated business service that coincides with a step of a business service that has already been reserved with the information processing module as claimed.

Bernardin et al. teach a system and method for load balancing comprising:

- registering in advance the business process configuration information definition that includes (judgment) information indicating contents of the start/finish processes of each business service (Column 8, Lines 43-64; Column 13, Lines 35-54);

- comparing the (judgment) information of an already-reserved business service with the (judgment) information of the designated business service (Column 8, Lines 64-68; Column 9, Lines 1-6; Column 12, Lines 43-61; Column 15, Lines 5-25); and

- omitting (skip, drop, remove, bypass, cancel, ignore, etc.) a step in the start or finish process of the designated business service that coincides with a step of a business service that has already been reserved with the information processing module (Column 5, Lines 60-65; Columns 6, 1-3; Column 11, Lines 14-26, 40-50)

in an analogous art of sharing a plurality of information processing modules among business processes (Column 4, Lines 1-13) for the purpose of scaling business process execution (Column 5, Lines 20-35).

It would have been obvious to one skilled in the art at the time of the invention that the load balancing system and method as taught by Aman et al. would have benefited from comparing judgment information of an already reserved (scheduled) business service with judgment information of a designated service as well as omitting (skip, drop, remove, bypass, cancel, etc.) a step in the start or finish process of the designated business service that coincides with a step of a business service that has already been reserved with a information processing module in view of the teachings of Bernardin et al. since the claimed invention is merely a combination of old elements,

and in the combination each element merely would have performed the same function

as it did separately, and one of ordinary skill in the art would have recognized that the

results of the combination were predictable.

Regarding Claims 2, 10 and 18 Aman et al. teach a load balancing system and

method where the partitioning of the schedule is conducted in units of spans where the

service level objective remains constant (Column 17, Lines 33-37; Column 28, Lines 18-

53; Figures 11, 12A, 12B).

Regarding Claims 5-7, 13-15 and 21-22 Aman et al. teach a load balancing

system and method further comprising substituting one process/service for another

(Column 20, Lines 17-35; Figures 6A-6C) and selecting/assigning process/business

service such that it does not impact/effect an already reserved information processing

reservation (does not assign additional request to resources with little/no capacity

remaining; Column 17, Lines 5-30).

Aman et al. does not expressly teach omitting a particular step in a start or finish

process as claimed.

Berndardin et al. teach a load balancing system and method wherein the

information processing reservation is made omitting a particular step in a start or finish

process if a step is capable of substituting for the particular step that has not been

omitted; if the omission of the particular step has no effect on the already reserved

business service; or if flag information of the particular step exists in flag information of

a start process of a subsequent already reserved business process (Column 5, Lines

60-65; Columns 6, 1-3; Column 11, Lines 14-26, 40-50).

It would have been obvious to one skilled in the art at the time of the invention

that the load balancing system and method as taught by Aman et al. would have

benefited from omitting a step in a start or finish process (step) of a business process by

flagging contents indicative of the start/stop process in view of the teachings of

Bernardin et al. since the claimed invention is merely a combination of old elements,

and in the combination each element merely would have performed the same function

as it did separately, and one of ordinary skill in the art would have recognized that the

results of the combination were predictable.

Regarding Claims 8 and 18 Aman et al. teach a load balancing system and

method wherein (diversion) information indicating that an information processing

module has already been researched by another business service into the designated

business service when it is impossible to fully reserve the information processing

module for executing the designated business service (Column 17, Lines 5-30; Column

20, Lines 17-35; Figures 6A-6C).

Regarding Claim 19 Aman et al. does not expressly omitting a step in a start/stop process as claimed.

Bernardin et al. teach omitting (skipping, ignoring, canceling, etc.) a step by including flag information indicating contents of the start and finish process of each business service in the previously registered business configuration definition; and comparing the flag of the already reserved business service with the flag of the designated service (Column 5, Lines 60-65; Columns 6, 1-3; Column 11, Lines 14-26, 40-50; Column 8, Lines 64-68; Column 9, Lines 1-6; Column 12, Lines 43-61; Column 15, Lines 5-25) in an analogous art of load balancing.

It would have been obvious to one skilled in the art at the time of the invention that the load balancing system and method as taught by Aman et al. would have benefited from omitting a step in a start or finish process (step) of a business process by flagging contents indicative of the start/stop process in view of the teachings of Bernardin et al.; since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized that the results of the combination were predictable.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- Elliot et al., U.S. Patent No. 6,335,927, teach a system and method for load balancing business services amongst a plurality of information processing modules.

- Ibe et al., U.S. Patent No. 6,437,804, teach a system and method for provisioning business services amongst a plurality of information processing partitions.

- Ball et al., U.S. Patent No. 6,446,200, teach an information processing service management system and method.

- Shahabuddin et al., U.S. Patent No. 6,877,035, teach a system and method for load balancing for a system having storage and information processing modules that can be shared among a plurality of business services.

- Yoshimura et al., U.S. Patent No. 7,062,559, teach a system and method for load balancing for a system having storage and information processing modules that can be shared among a plurality of business services.

- Watt, U.S. Patent No. 7,213065, teach a system and method for dynamic allocation and provision of information processing modules for business services.

- Daoud et al., U.S. Patent Publication No. 2002/0087694, teach a system and method for load balancing business services amongst a plurality of business services wherein judgment information is used to allocate business services to information processing systems that meet the desired service level objectives.

- Budhiraja et al., U.S. Patent Publication No. 2003/0140126, teach a system and method having storage and information processing modules that can be shared among business services.

- Peakstone and Alteon to Provide Breakthrough Internet Service Assurance (2000), teach a system and method for load balancing business services among a plurality of information processing modules an storage based on service level objectives.

- Bhinder, Design and Evaluation of Request Distribution Schemes for Web-Server Clusters (2002), teaches a plurality of methods for load balancing for a system

having a storage and a plurality of information processing modules that can be shared among business services.

- ProvisionSoft Certified Emulex HBAs for User With Its DynamicIT Software Solution (2003), teach a system and method for dynamic policy-based automated resource management (service provisioning).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SCOTT L. JARRETT whose telephone number is (571)272-7033. The examiner can normally be reached on Monday-Friday, 8:00AM - 5:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Bradley Bayat can be reached on (571) 272-6704. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Scott L Jarrett/
Primary Examiner, Art Unit 3624